

## ABSTRACT OF THE INVENTION

5           A light controlling film is disclosed, comprising a polymerized  
polymer network varying spatially in a direction normal to the film  
surface, where the polymerized polymer network is a crosslinked high  
molecular weight polymeric material mixed with a low molecular weight  
nematic material exhibiting cholesteric liquid crystal (CLC) order, wherein  
10       an electric field impressed in the film controls the reflection bandwidth of  
circularly polarized light.